

1594A Multi-Conductor - Category 5e Indoor/Outdoor CMR/CMX Cable

For more Information
please call

1-800-Belden1



General Description:

CAT5e (200 MHz), 4 Pair, U/UTP-Unshielded, Indoor/Outdoor CMR-CMX Outdoor, Premise Horizontal Cable, 24 AWG Solid Bare Copper Conductors, Polyolefin Insulation, Ripcord, UV-Resistant PVC Jacket

Usage (Overall)

Suitable Applications: Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422, Outdoor

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
4	24	Solid	BC - Bare Copper

Total Number of Conductors: 8

Insulation

Insulation Material:

Insulation Material
PO - Polyolefin

Outer Shield

Outer Shield Material:

Outer Shield Material
Unshielded

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Outer Jacket Diameter:

Nom. Dia. (mm)
5.588

Outer Jacket Ripcord: Yes

Pair

Pair Color Code Chart:

Number	Color
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

Mechanical Characteristics (Overall)

Storage Temperature Range: -40°C To +75°C

Installation Temperature Range: -20°C To +75°C

Operating Temperature Range: -40°C To +75°C

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UL Temperature Rating:	90C
Bulk Cable Weight:	31.252 Kg/Km
Max. Recommended Pulling Tension:	155.687 N
Min. Bend Radius/Minor Axis:	25.400 mm
Min. Bend/Installation:	57.150 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMR, CMX, UL444
CEC/C(UL) Specification:	CMR
EU Directive 2011/65/EU (ROHS II):	Yes
IEEE Specification:	POE per IEEE 802.3af & POE+ per IEEE 802.3at-2009
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Telecommunications Standards:	Category 5e - TIA 568.C.2
ANSI Specification:	ANSI/TIA 568-C.2 Category 5e and ANSI/ICEA S-90-661-2012 Category 5e
Other Specification:	ANSI/ICEA S-56-434 Outdoor Use, ANSI/ICEA S-100-685 Indoor/Outdoor Use and ANSI/ICEA S-99-689 Broadband Outdoor Use

Flame Test

UL Flame Test:	UL1666 Vertical Riser
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Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Aerial:	Yes - When supported by messenger wire
Suitability - Burial:	No
Sunlight Resistance:	Yes

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	1585A
Non-Plenum Number:	1583A

Electrical Characteristics (Overall)

Nom. Mutual Capacitance:

Capacitance (pF/m)	49.215
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Maximum Capacitance Unbalance (pF/100 m):	330
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Nominal Velocity of Propagation:

VP (%)	68
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Maximum Delay:

METRIC MEASUREMENT VERSION

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Delay (ns/100 m)

510 @ 100MHz

Max. Delay Skew:

Delay Skew (ns/100 m)

45

Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)

9.38

Max. Operating Voltage - UL:

Voltage

300 V RMS

Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)

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Electrical Characteristics-Premise (Overall)

Premise Cable Electrical Table 1:

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ACR (dB)	Min. PSACR (dB)	Min RL (dB)	Min. SRL (dB)
1	2.000	65.3	62.3	63.3	60.3	20.000	23
4	4.100	56.3	53.3	52.2	49.2	23.000	23.0
8	5.800	51.8	48.8	46.0	43.0	24.500	24.5
10	6.500	50.3	47.3	43.8	40.8	25.000	25.0
16	8.200	47.3	44.3	39.0	36.0	25.000	25.0
20	9.300	45.8	42.8	36.5	33.5	25.000	25.0
25	10.400	44.3	41.3	33.9	30.9	24.300	24.3
31.25	11.700	42.9	39.9	31.2	28.2	23.600	23.6
62.5	17.000	38.4	35.4	21.4	19.0	21.500	21.5
100	22.000	35.3	32.3	13.3	10.3	20.100	20.1
155	28.100	32.5	29.5	4.4	1.4	15.800	
200	32.400	30.8	27.8			15.000	

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	100 ± 15	63.8	60.8
4	100 ± 15	100 ± 15	51.7	48.7
8	100 ± 15	100 ± 15	45.7	42.7
10	100 ± 15	100 ± 15	43.8	40.8
16	100 ± 15	100 ± 15	39.7	36.7
20	100 ± 15	100 ± 15	37.7	34.7
25	100 ± 15	100 ± 15	35.8	32.8
31.25	100 ± 15	100 ± 15	33.9	30.9
62.5	100 ± 15	100 ± 15	27.8	24.8
100	100 ± 15	100 ± 15	23.8	20.8
155	100 ± 25	100 ± 15	19.9	16.9
200	100 ± 25	100 ± 15	17.7	14.7

Notes (Overall)

Notes: Third party verified to TIA/EIA-568-C.2, Category 5e, Print Includes Descending Footage / Meter Markings, -40C Cold Bend Compliance Per UL1581.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1594A 008U1000	1,000 FT	25.000 LB	GRAY		CAT5E 4PR U/UTP CMR/CMX BOX
1594A 009U1000	1,000 FT	25.000 LB	WHITE		CAT5E 4PR U/UTP CMR/CMX BOX
1594A 1GFU1000	1,000 FT	25.000 LB	IVORY 1GF		CAT5E 4PR U/UTP CMR/CMX BOX

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